

## **Science and industry: Bridging the gap to identify harbour porpoise (*Phocoena phocoena*) seasonal movements and habitat use.**

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The inland waters of British Columbia and Washington represent a significant region used by commercial wildlife viewing industry. From 1995 to 2004, experienced whale watchers collected data on the distribution and habitat use of harbour porpoise (*Phocoena phocoena*). These opportunistic data augmented a vessel-based line-transect survey to estimate seasonal abundance of harbour porpoise in southern Vancouver Island waters. The study area encompassed 235 square nautical miles and included the Canadian waters of Juan de Fuca and Haro Straits. Forty-seven line-transect surveys were conducted from September 2001 - August 2002, and sampling was restricted to Beaufort 0 and 1. Analyses were carried out using Distance 3.5 software. Previously unknown seasonal fluctuations in numbers and distribution were identified, with the greatest mean density (531 porpoise, CV=21.20%) occurring from April to October. Estimates declined to an average of 98 porpoises for the remainder of the year (November to March, CV=37.1%). The line-transect estimates were consistent with the opportunistic wildlife viewing data (1995 - 2001, n=2595 hours) of calves and large aggregations. Our findings suggest that the southern Vancouver Island area is a seasonally important habitat for harbour porpoise, and one that may be critical to their reproductive success.